



Impact of Risk Management Towards Sustainability of Microfinance Industry in Sri Lanka: A Case Study

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Abstract: The purpose of this study is to investigate the relationship between risk management practices and the sustainability of the microfinance industry in Sri Lanka. Given the rapid growth of the microfinance sector over the past two decades, understanding how effective risk management contributes to long-term sustainability is crucial. The study employed a quantitative research design, utilizing simple regression analysis to explore the hypothesized relationship between risk management (independent variable) and sustainability of the microfinance industry (dependent variable). The sample consisted of 376 women microfinance borrowers from three districts in Sri Lanka, selected using a cluster sampling approach. Primary data were collected through surveys, while secondary data were obtained from the Central Bank of Sri Lanka (CBSL), MFI annual reports, and the Microfinance Information Exchange (MIX). The analysis revealed a significant positive relationship between effective risk management and the sustainability of the microfinance industry in Sri Lanka. The results indicate that improvements in risk management practices are likely to enhance the long-term viability of microfinance institutions, ensuring their capacity to continue serving low-income clients effectively. The findings underscore the importance of robust risk management frameworks for the sustainability of the microfinance industry in Sri Lanka. Despite the growth of the sector, without effective risk management, the long-term success and stability of microfinance institutions may be compromised. This study highlights the need for microfinance institutions to prioritize risk management as a critical component of their operational strategies. Policymakers and industry regulators should encourage and support the development of risk management capacities within MFIs to safeguard the industry's future. Further research could expand the scope to include more districts and a broader range of MFIs to validate these findings and explore additional factors influencing sustainability.

Keywords: Government of Sri Lanka, Central Bank, Microfinance Institutes, Risk Management, Self Helped Groups (SHG), Microfinance information exchanges (MIX)

1. Introduction

The concept of microfinance predominantly evolved as a tool to eradicate poverty and support poor communities by uplifting their financial and social well-being. Microfinance is designed to assist a particular segment of the community that is typically unable to access conventional banking services (Al-Tamimi, 2002; Bhatt & Tang, 2001). As the microfinance industry expands, Microfinance Institutions (MFIs) face the challenge of managing various risk dimensions, particularly credit and liquidity risks. Additionally, operational risks arise from increasing competition, market complexities, volatile economic conditions, social environments, natural disasters, and pandemics—challenges especially prevalent in developing nations (Fernando, 2007).

In such a dynamic environment, risk cannot be avoided; instead, it must be managed effectively. All stakeholders must participate in adopting adequate controls, processes, frameworks, and strategies that sustain the industry and safeguard the interests of both MFIs and their clients. Risk management in isolation is ineffective; a collaborative approach is essential. Managing risk is not a new concept, but its prioritization and prominence have become increasingly significant, particularly in the wake of financial crises.

Risk management and compliance have become pivotal in the financial sector. According to the Risk Management Initiative in Microfinance (RIM), the risk is defined as “the possibility of adverse events occurring and their potential for financial losses and negative social performance.” Risk-taking is a natural and essential element of life and business. Without taking risks, generating returns or achieving satisfaction is impossible. There is a common adage: “high risk, high return; low risk, low return.”

In the microfinance industry, the environment and customer segment are particularly high-risk, making effective risk management crucial to the long-term sustainability of MFIs. Risk is an integral component of financial services, and the industry faces multiple risk factors, more so than other sectors. Credit facilities, for instance, create a counterparty risk of default, where the failure of one microfinance

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company can trigger a ripple effect across the entire industry. Thus, instilling a disciplined and controlled risk management process is of paramount importance in the microfinance industry. This article provides an overview of the different risk aspects and discusses how these risks can be effectively managed to ensure the sustainability of MFIs.

2. Literature Review

The primary literature sources for this study include World Bank research reports, international policy studies, Central Bank of Sri Lanka publications, Basel journals, theses, and other published articles. While there is abundant literature on risk management and microfinance separately, there is a scarcity of studies that combine both concepts into a cohesive framework. According to Khakhrisal (2009), risk is defined as “an uncertainty of outcome that affects objectives, representing a two-sided coin: on one side, there is a threat, and on the other, an opportunity.” Risk is an integral and inherent part of any business, and MFIs are no exception. Unlike other financial institutions, microfinance institutions must focus special attention on security risks due to the unavailability of certain risk mitigation options, such as collaterals, guarantees, and asset pledges. However, this does not imply that MFIs should avoid risk-taking or curtail lending. Instead, the strategy should optimize the risk-reward or risk-efficiency trade-off (Al-Tamimi & Al-Mazrooei, 2007; Khakhrisal, 2009). Without taking risks, business operations and the generation of returns would not be feasible.

Risk and reward are fundamental components of doing business. Therefore, a proactive and effective risk management approach is crucial to the long-term sustainability of MFIs. As highlighted by the Microfinance Insights Blog (2009), the conversation in the microfinance sector has shifted from focusing on competition and “crowding out” to emphasizing resilience and the survival of the fittest, reflecting the industry's evolving challenges.

Oluyombo and Olabisi (2008) emphasize the importance of managing risk to avoid financial and social asset losses, ensuring the uninterrupted supply of funding to microfinance end-users as needed. There is a growing recognition that the modern trends in microfinance necessitate a redesign of risk management strategies. The complexity of current financial systems, structural changes, evolving objectives, and the variability of recipients and institutions involved require a more structured approach to risk management (Ilbert et al., 2006). Raue, Brown, Meyers, Schulberg, and Bruce (2006) argue that banks must carefully select which risks to take, transfer, or avoid while managing risk. The question arises: do microfinance institutions have the same alternatives in terms of risk exposure?

The primary and vital features of sound risk management can be easily described in theory, but applying them across the board is challenging and requires a case-by-case approach. Each scenario is unique, shaped by the roles and capabilities of individuals, institutional objectives, structures, and activities. Meyer (2002) notes that “a sound or adequate risk management system is ever-changing, as new technology accommodates innovation and better information, and as market efficiency grows.” Institutions must adapt and constantly improve their processes to remain competitive. Risk management focuses on reducing earnings volatility and avoiding significant losses. An effective risk management process involves identifying, measuring, and quantifying risk, followed by developing strategies to manage it (Kalu, Shieler, & Amu, 2018). Risk management is essential for maintaining the quality of both liquid and illiquid assets and safeguarding depositors' funds, thereby ensuring the industry's sustainability.

It is evident that risk management in MFIs requires clear directions and goals set from the top down; without this, effective risk management cannot be achieved. MFIs should not assume that money will continuously flow in or that growth will be indefinite. It is crucial for MFIs to grow at a sustainable pace, with more emphasis on long-term sustainability and survival. Currently, many MFIs in Sri Lanka adopt short-term strategies to generate high returns before exiting the business. Saturating existing operational areas before large-scale horizontal expansion may be a better growth strategy, reducing costs and increasing efficiency in caseload management (Guardiola-Albert et al., 2020). The first step is to establish clear objectives and motivate owners and management to manage risk proactively on a daily basis.

Himang et al. (2020) state that “experience has shown that the core principles and practices of microfinance are the same as those found in other environments,” highlighting five basic “principles of financially viable lending”: demand-driven product development, operational efficiency, strong repayment discipline, sound financial performance, and achieving scale. Risk management plays a significant role in achieving these principles. If MFIs' risk management is subpar, the soundness of financial performance and repayment discipline will be compromised. Even with demand-driven products, high nonperforming advances (NPA) will negatively impact operational efficiency. All these aspects are interlinked, and managing risk is critical for long-term sustainability. Among the many components of risk management, credit risk is particularly important.

Like in any banking industry, default rates vary. Grameen Bank, the Bangladeshi institution widely regarded as a pioneer in the sector, reported a default rate of just 0.41% in its 2017 annual report—a desirable outcome for any commercial bank. The bank's chairman attributed this credit record to the “high level of trust and goodwill between the bank and its borrowers,” demonstrating how microfinance can become integrated into local communities (Asadli, de Mesquita, & Kazantseva).

Numerous studies have underscored the importance of risk management and its impact on profitability, showing statistical significance to the sustainability of the industry. Hallunovi and Berdo (2018) found a significant and positive relationship between bank Return on Equity (ROE) and credit risk management. Furthermore, Ndoka and Islami (2016) found that if Non-Performing Loans (NPL) increase by one unit, profitability as measured by Return on Assets (ROA) will decrease by 0.2869 units and Return on Equity (ROE) by 0.018582 units. MFIs face many risks that threaten their long-term viability and sustainability, making careful screening, monitoring, evaluation, accurate reporting, and strong credit practices essential (Razzaq, Maqbool, & Hameed, 2019; Rozzani, Mohamed, & Yusuf, 2017).

The subsequent sections of this article will discuss the findings and recommendations derived from this study, taking into account the literature and empirical studies reviewed. This study hypothesizes that one independent variable—Risk Management—affects one dependent variable—the sustainability of the microfinance industry in Sri Lanka.

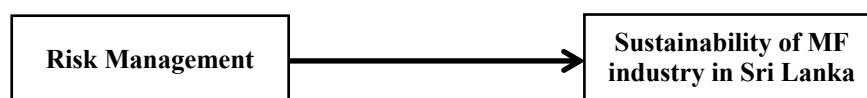


Figure 1: Conceptual framework

3. Research Methodology

The study employed a descriptive research design and utilized quantitative methods to achieve the research objectives. The descriptive design facilitated the effective and meaningful organization and summarization of data, while the quantitative method allowed for the numerical explanation of the data. The population for this study comprised women who had availed themselves of microfinance facilities from different MFIs in Sri Lanka. The sample was selected using a cluster sampling method, where clusters were chosen based on the villages, considering various groups within the community, such as Self-Help Groups (SHG), activity-based subgroups, community-based subgroups, and farming groups. Microfinance clients are spread across different areas, displaying both heterogeneous and homogeneous characteristics.

The sample size was determined following the guidelines by Krejcie and Morgan (1970) and Cohen (1988) on sample size decisions. A total of 376 microfinance borrowers were selected from a population of approximately 20,000 in three districts across three major provinces in Sri Lanka. These participants were drawn from three leading MFIs that agreed to participate in the research. The sampling frame was determined and screened using data from the loan books of these three prominent microfinance companies. The target population was selected from Kalutara (Western Province), Puttalam (North Central Province), and Monaragala (Uva Province), ensuring that the sample selection represented major provinces in Sri Lanka, encompassing diverse demographic characteristics and covering a range of economic indicators. This approach mitigated potential biases by ensuring that all three districts were not confined to one province.

The research primarily focused on gathering feedback from microfinance borrowers within the target areas, making the individuals the unit of analysis. Data were collected from both primary and secondary sources. Secondary data were obtained from Central Bank Annual Reports, MFI annual financial statements, and Census and Statistics Department data. A structured questionnaire was employed to collect primary data. Given that the survey targeted specific small clusters within the Grama Niladari Division (GA)—the smallest administrative unit under the federal government—physically administering the questionnaires was considered an effective data collection method. The study's time horizon was cross-sectional, indicating that data were collected at a single point in time, possibly over a few weeks or months. Data collection was delayed due to the pandemic situation. The study analyzed the data using graphical methods, statistical techniques, and basic regression analysis to explore the relationship between the variables.

4. Results And Analysis

This study focuses on four key demographic factors—age, religion, number of dependents, and level of education—analyzed using graphical presentation techniques such as bar charts and pie charts.

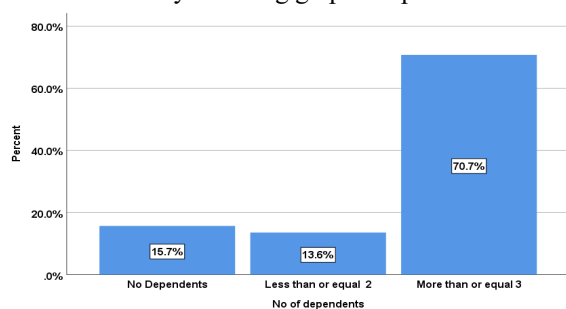


Figure 2: Number of dependents for each household

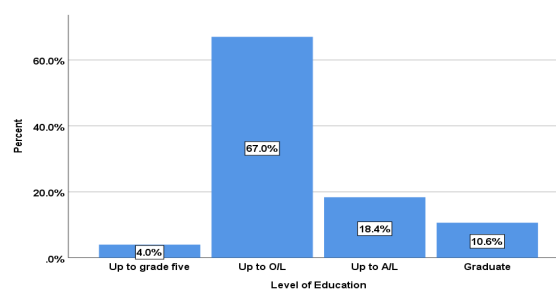


Figure 3: Education Level

Figure 2 illustrates the number of dependents per household. Over 70.7% of respondents have three or more dependents in their families, while 13.6% have two or fewer dependents, and 15.7% have no dependents at all.

This data highlights that most women microfinance borrowers in the Kalutara, Puttalam, and Monaragala districts have significant family responsibilities.

Education and literacy levels play a crucial role in the borrowers' understanding of business risks and management. Figure 3 shows the educational attainment of the sample respondents. A majority have studied up to the Ordinary Level (O/L), accounting for two-thirds of the sample. Additionally, 18.4% have an Advanced Level (A/L) education, and 10.6% are graduates. However, 4% have only studied up to grade five, indicating that the majority of women microfinance borrowers in the Kalutara, Puttalam, and Monaragala districts have a relatively low level of formal education.

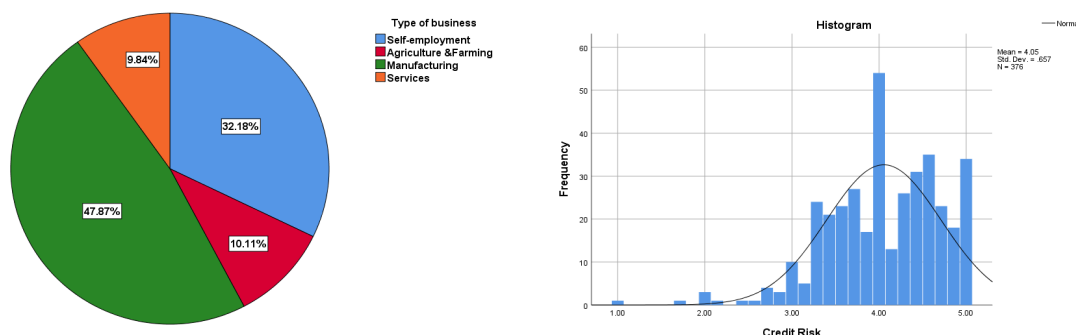


Figure 4: Type of Business Involved by the Respondents of the Sample. **Figure 5:** Histogram of Credit Risk

Figure 4 presents the types of businesses engaged by microfinance borrowers. The majority (47.87%) are involved in manufacturing, 32.18% in self-employment, 10.11% in agriculture and farming, and 9.84% in the service sector. This suggests that more than 80% of women microfinance borrowers in these districts are engaged in manufacturing and self-employment-related businesses.

Credit risk, a critical component of risk management, is essential for the sustainable growth of the microfinance industry. The study found that effective risk management processes, including proper credit evaluation, decision-making, knowledge sharing, monitoring, and customer assessment, are vital for industry sustainability in Sri Lanka. Survey responses indicate that these factors significantly impact the management of credit risk in microfinance, which is crucial for the business's sustainability. Previous studies, such as Kanake (2014), emphasize that credit risk management is critical to the success and survival of microfinance institutions. Poor portfolio management has been identified as a primary cause of failure in the microfinance sector (Mbah & Wasum, 2019), reinforcing the idea that credit risk management plays a substantial role in the industry's sustainability.

Survey results show a mean response of 4.0540 for credit risk-related statements, with a median of 3.9874 and a 5% trimmed mean of 4.1205. These values indicate that the majority of respondents agree with the statements related to credit risk. The standard error of the mean is 0.03386, with a 95% confidence interval between 3.9874 and 4.1205, further supporting the general agreement on credit risk issues. The standard deviation is 0.65654, with a variance of 0.431, indicating low variability in responses. The minimum and maximum responses are 1.00 and 5.00, respectively, with a response range of 4.00 and an interquartile range of 1.00, suggesting limited deviation from the mean response.

The skewness of -0.761 indicates a left-tailed distribution, while the kurtosis of 1.144 suggests a peaked distribution. This negatively skewed distribution, as shown in Figure 5, indicates that responses to credit risk-related statements are predominantly skewed towards agreement.

4.1. Regression Analysis

Simple regression analysis was employed to examine the relationship where one independent variable is hypothesized to affect one dependent variable. This study aimed to establish that effective risk management positively influences the sustainability of the microfinance industry in Sri Lanka. The researcher gathered data from the target demographic on their perceptions of risk management and the support they receive to maintain their businesses. Notably, this study is unique as it collected insights from end-user women microfinance consumers, unlike most previous studies that focused on input from MFI firm personnel. A simple linear equation, represented by a straight line, depicts the link between effective risk management and the sustainability of the microfinance industry.

Table 1: Simple Linear Regression Analysis

R-Square	Adjusted R-Square	F-Statistic	Significance
0.519	0.518	403.826	0.000
Variable	B	t-Statistic	Significance
Risk Management	0.747	20.095	0.000

Source: Calculated by the researcher

According to the table, the R-Square value is 0.519, and the adjusted R-Square is 0.518, indicating that there is 51.8% variability in the sustainability of the microfinance industry in Sri Lanka. The model is considered adequate because the significance level of the F-statistic (0.000) is below the 0.05 threshold. Additionally, risk management is shown to have a significant impact on the sustainability of the microfinance industry in Sri Lanka, as the significance level of the t-Statistic (0.000) is also below the 0.05 threshold. Therefore, there is a significant impact of risk management on the sustainability of the microfinance industry in Sri Lanka.

The regression analysis provided an R-squared value that measures the goodness of fit of the model, where values range from 0 to 1, with 0 representing a poor model and 1 representing a perfect model. In this study, an R-squared value of 0.519 suggests that the model is fairly reliable. The estimated regression equation can be formulated as:

$$\text{Sustainability of the microfinance industry in Sri Lanka} = 1.121 + 0.747 * \text{Risk Management}$$

According to this equation, a one-unit increase in risk management leads to a 0.747-unit increase in the sustainability of the microfinance industry in Sri Lanka, implying that risk management has a strong impact on the sustainability of the industry.

The analysis clearly indicates that risk significantly affects MFIs, and risk factors have a considerable impact on the drivers of sustainability. The hypothesis also confirms that the identified drivers of sustainability have a significant effect on MFIs. Therefore, it is recommended that MFIs in any country conduct thorough risk analyses on all their business operations to address any risk-related issues. MFIs should urgently develop a risk manual or framework to manage risks and ensure compliance with internal risk policies, reporting regularly. Furthermore, regulators should mandate that the approval of new licenses includes a comprehensive risk policy or manual as a basic requirement.

5. Discussion

The concept of microfinance is widely recognized as a powerful tool for reducing global poverty and providing essential financial services to segments of the population that are typically underserved by traditional financial institutions. Despite its potential, countries like Sri Lanka face significant challenges in bridging the gap between the industry's growth potential and its sustainability. Numerous factors influence the sustainability of the microfinance industry, including the availability of low-cost funds, outreach, borrower characteristics, business characteristics, loan characteristics, the behavior of MFIs, and the characteristics of target clients, among others.

The findings of this study reveal a significant relationship between effective risk management and the sustainability of the microfinance industry in Sri Lanka. Therefore, it is crucial to discuss how risk management can be utilized to achieve desired outcomes. The influx of a large number of players into the industry, coupled with a weak monitoring mechanism, has exposed the industry to considerable vulnerabilities, raising concerns about its long-term sustainability. All stakeholders, particularly MFIs and their clients, bear a significant responsibility to safeguard the industry. Failure to do so could jeopardize not only the MF industry but also the fundamental principles of microfinance in the long run.

In the current economic climate, a pressing issue for MFIs is the surge in loan defaults among individual borrowers, driven by deep financial vulnerability and a downturn in market activities—a situation exacerbated by the COVID-19 pandemic. Financial institutions and other stakeholders are increasingly recognizing the importance of a proactive approach to maintaining strong financial stability, which can help mitigate the likelihood of negative outcomes. An effective risk management process is essential for MFIs to minimize negative consequences. This means attempting to control future outcomes as much as possible by acting proactively rather than reactively. Effective risk management offers the potential to reduce both the likelihood of a risk occurring and its potential impact (Savalei, 2018).

Literature suggests that MFIs themselves are partly responsible for loan defaults due to poor management decisions, weak risk management frameworks, and inadequate strategies, along with a failure to understand borrowers' financial needs. However, the blame should not rest solely on MFIs; macroeconomic factors, as well as the influence of borrowers' families and loan groups, also play a significant role (Priyankara & Sumanasiri, 2019). Although there are established stages, processes, and literature on risk management, the main challenge lies in whether stakeholders are adequately equipped and motivated to adopt and adhere to these practices. Due to high competition and limited market opportunities, many players neglect these best practices, ultimately endangering the entire industry.

Risk management is a challenging and complex task for any business or financial organization. In today's interconnected world, where financial systems and economic events are closely linked, risk management has become increasingly important. Banking regulators and global financial institutions have emphasized risk management as a critical element for long-term success. There has been a gradual shift towards identifying portfolio risk and transitioning from incurred risk to expected risk. As market dynamics evolve and various risk factors emerge, regulators are placing greater emphasis on understanding future risks as predictors of long-term success, rather than relying solely on past financial performance. This shift is reflected in the transition from

incurred credit losses (ICL) to expected credit losses (ECL), as recommended by the Basel Committee (Basel Guidance on Accounting for Expected Credit Losses, 2015, IFRS 9). Although the Basel guidelines do not specifically categorize sectors or financial institutions, it would be prudent for microfinance institutions (MFIs) to explore the possibility of adopting these guidelines, or at least laying the groundwork for doing so.

A key issue is that MFIs often prioritize generating shareholder profit over the long-term viability of their businesses and the growth of their client base. Failing to cultivate a robust risk culture could have disastrous consequences for all stakeholders. Risks can arise in various forms and cannot be predicted or deferred until disaster strikes. In today's fast-paced business environment, it is impossible to know when a risk will materialize. The fundamentals of risk management include establishing the context, identifying the risk, quantifying the risk, integrating the risk, prioritizing the risk, and mitigating and controlling the risk.

Effective risk management offers several advantages. It is always preferable to detect early warning signs before potential problems arise. A systematic and professional approach to assessing, identifying early warning signs, evaluating, and measuring risk can prevent the waste of organizational resources and management time. If MFIs recognize risks in advance, it becomes easier to implement solutions and minimize risk. Consequently, time can be better spent expanding the business and strengthening its market position.

It is evident that, like other financial institutions, MFIs often place insufficient emphasis on risk management, focusing primarily on loan issuance and recovery. Identifying the right target group for loans, evaluating non-performing loans (NPLs), and implementing proper treasury management are critical to surviving in the MFI market. If MFIs operate as if they were private money lenders, the sector will be in jeopardy in the long term. MFIs should adopt the same risk management methodology and structure as other financial institutions to ensure their long-term viability.

It has been observed that many micro, small, and medium-sized enterprise (MSME) entrepreneurs lack financial literacy, which poses a significant challenge to the industry's sustainability. Clients may attempt to diversify into unrelated and risky business ventures, leading to private spending and a decline in financial discipline. A lack of financial literacy is one of the primary concerns affecting the industry's sustainability. MFIs should focus on building financial education for their clients, treating them as partners in progress. Investing in financial literacy will undoubtedly help reduce risks in various sectors.

Although promoting financial literacy is a gradual process, it is essential for transforming the inherent loss system into an effective risk culture. Enhancing financial literacy and education will assist MFI clients in developing better financial attitudes, knowledge, and behaviour. A client's financial attitude reflects their awareness and judgments about money matters, application, management, and the use of financial services. As opinions and judgments change over time, they significantly influence behaviour. Improving financial literacy will help instil informed financial behaviour in clients' businesses and households.

Clients should develop appropriate strategies for risk management, understanding and assessing the risks in their businesses and households, and taking effective steps to eliminate or reduce them. They should recognize the importance of managing loan funds and utilizing them for productive purposes that generate income for loan repayment, rather than for non-productive consumption. Borrowers should also spend wisely, save for emergencies, and build assets.

Clients who receive financial education will gradually accumulate assets, such as property, jewelry, equipment, animals, and savings, based on retained earnings and cash flows. Understanding short-, medium-, and long-term investments is crucial, as many clients currently invest working capital in long-term ventures, leaving them stranded. This highlights the importance of financial education.

Moreover, financial education will help clients manage their loan portfolios more professionally and effectively, reducing over-indebtedness. Clients will gain a better understanding of financial costs, allocate funds for income-generating activities, settle high-cost borrowings, and gradually shift from borrowing in the informal financial sector to the formal sector. By doing so, they will reduce excessive borrowing and minimize overdue payments.

Therefore, it is clear that risk management cannot be practised in isolation. Both MFIs and borrowers must understand the seriousness of the risk, why it exists, and how it should be managed. To ensure the long-term viability of the industry, all stakeholders must share the responsibility of managing risk.

6. Conclusion

The Microfinance industry in Sri Lanka has experienced significant growth over the past two decades, particularly in the last ten years. This momentum is likely to continue into the next decade. However, such growth must be aligned with the long-term sustainability of the industry, rather than being driven by short-term strategies and tactics that focus solely on MFIs' performance. The primary challenge for MFIs is to manage this growth while ensuring that their institutional systems support their core mission and values. Rapid growth that is not carefully managed could dilute an MFI's mission and values, potentially increasing client vulnerability. Therefore, MFIs must prioritize their clients, particularly their target segments, as being customer-focused is one of the most effective risk management strategies.

Research on risk management in Sri Lanka's microfinance sector has been limited, particularly in terms of obtaining feedback directly from clients about their understanding, perceptions, and expectations regarding MFIs from a risk management perspective. Most studies have focused on the perspectives of MFI officials, rather than the end-users. This study provides an opportunity to explore other influential factors affecting the sustainability of the microfinance industry in Sri Lanka. The contents and discussions in this article represent just the beginning of a deeper understanding of the importance of the microfinance industry and risk management.

Further research is necessary to identify the determinants of MFI behaviour and to explore cause-and-effect relationships. Moving forward, it is crucial to investigate how to synergize key factors—particularly effective risk management and the involvement of women borrowers—to ensure the long-term sustainability of the microfinance industry in Sri Lanka.

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